

**CALFED Bay-Delta Program Project Information Form  
Watershed Program – Full Proposal Cover Sheet**

**1. Full Proposal Title:** Shasta West Watershed Assessment  
**Concept Proposal Title/ Number:** Shasta West Watershed Assessment #0062  
**Applicant:** Western Shasta Resource Conservation District  
**Applicant Name:** Tom Engstrom, President, Board of Directors  
**Applicant Mailing Address:** 3294 Bechelli Lane, Redding, CA 96002  
**Applicant Telephone:** (530) 224-3250   **Fax:** 224-3253  
**E-Mail:** wsrcd@westernshastarcd.org

**Fiscal Agent Name (if different):** same  
**Fiscal Agent Mailing Address:**  
**Fiscal Agent Telephone:**                      **Fax**                      **E-Mail:**

**2. Type of Project: Indicate the primary topic for which you are applying (check only one)**

|                                     |                   |                          |            |
|-------------------------------------|-------------------|--------------------------|------------|
| <input checked="" type="checkbox"/> | Assessment        | <input type="checkbox"/> | Monitoring |
| <input type="checkbox"/>            | Capacity Building | <input type="checkbox"/> | Outreach   |
| <input type="checkbox"/>            | Education         | <input type="checkbox"/> | Planning   |
| <input type="checkbox"/>            | Implementation    | <input type="checkbox"/> | Research   |

**3. Type of Applicant:**

|                                     |                     |                          |                             |
|-------------------------------------|---------------------|--------------------------|-----------------------------|
| <input type="checkbox"/>            | Academic/University | <input type="checkbox"/> | Non-Profit                  |
| <input type="checkbox"/>            | Federal Agency      | <input type="checkbox"/> | Private Party               |
| <input type="checkbox"/>            | Joint Venture       | <input type="checkbox"/> | State Agency                |
| <input checked="" type="checkbox"/> | Local Government    | <input type="checkbox"/> | Tribal or Tribal Government |

**4. Location (including County):**

What major watershed is the project primarily located in:

☐ Klamath River  
☒ Sacramento River  
☐ San Joaquin River  
☐ Bay-Delta  
☐ Southern CA  
☐ Tulare Basin

**5. Amount of funding requested: \$ 131,593**

Cost share/in-kind partners? ☒ YES    ☐ NO

Identify partners and amount contributed by each:

—  
—  
—

**6. Have you received funding from CALFED before?**    ☒ YES                      ☐ NO

If yes, identify project title and source of funds:

| Project Title                                 | Source of Funds |
|---|-----------------|
| Lower Clear Creek Channel Restoration Project |                 |
| Upper Clear Creek Prescription                |                 |

**By signing below, the applicant declares the following:**

1. The truthfulness of all representations in their proposal
2. The individual signing this form is entitled to submit the application on behalf of the applicant (if the applicant is an entity or an organization)
3. The person submitting the application has read and understood the conflict of interest and confidentiality discussion in the Watershed Program Proposal Solicitation Package and waives any and all rights to privacy and confidentiality of the proposal on behalf of the applicant, to the extent provided in the Proposal Solicitation Package.

Tom Engstrom, President, Board of Directors

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Tom Engstrom

# **1. Describe your project, its underlying assumptions, expected outcomes, timetable for completion and general methodology or process.**

The Shasta West Watershed is an area of rugged hills, located in the brush belt and transition zone between oak woodlands and timberlands just west of Redding, California. The watershed lies between 600-1500' elevation and contains four important ephemeral streams, coldwater lotic aquatic habitat. According to the California Resources Agency, streams such as these tend to support above-average numbers of spawning trout due to the way these upstream migrant fish become concentrated below a barrier such as Keswick Dam, upstream of the watershed. The young trout produced by these adults live in the streams until spring, when decreased flows and increased temperatures cue the fish to move downstream.

The Shasta West Watershed Assessment is the first step in the process of beginning of a partnership between the local community and the CALFED program, since CALFED goals and priorities are linked with local goals. Through educational opportunities the priorities and the connection will be established. The assessment is the basis for planning ecosystem management and a necessary step in identifying current and reference conditions and data gaps in order to set the stage for development of a watershed management plan that will provide clear guidance for resource conservation work and land use. Conducting an assessment requires 1) documenting existing conditions within the Shasta West watershed, by gathering existing data on the conditions of water, geology and soils, erosion, hydrology, vegetation, human uses, fire and fuels; 2) drawing conclusions, based on existing data, if watershed conditions may be limiting to beneficial water uses and/or anadromous and resident fish populations; 3) providing information to assist the Shasta West Watershed CRMP Group in preparing a watershed plan; 4) identifying areas where additional information is needed in order to adequately develop a watershed plan; and 5) providing staff support to the watershed program and educational/outreach to landowners and other stakeholders.

A complete watershed assessment establishes a base from which those agencies, stakeholders, and landowners can view the watershed at the landscape scale, sets the stage for developing a watershed management plan, where specific projects will be identified and prioritized for potential funding. A Technical Advisory Committee with representatives from California Department of Forestry and Fire Protection (CDF), Bureau of Land Management (BLM), Fish and Wildlife Service (FWS), Natural Resources Conservation Service (NRCS), Regional Water Quality Control Board (RWQCB), Department of Fish and Game (DFG) and Western Shasta Resource Conservation District (WSRCD) will participate in the process of developing the outline for the assessment's contents and will contribute conclusions and recommendations for each segment in the final report. The measure of benefit is the completion of the watershed assessment itself, since it serves as a base from which greater in-depth planning can be done.

The table of contents for the assessment will cover the areas shown below, and most likely have a format similar to the Lower Clear Creek Watershed Analysis, completed by WSRCD in 1996, the Upper Clear Creek Watershed Analysis, completed by WSRCD in 1999, and the Cow Creek Watershed Assessment, currently being completed.

The Table of Contents from the Lower Clear Creek report is as follows:

## Introduction

- Introduction to a Watershed Analysis
- Scope of the Analysis
- Relation to Local and Regional Plans
- Watershed Setting
- Land Use Patterns
- Current Demographics
- History
- Issues and Concerns

## The Aquatic Domain

- Introduction
- Hydrology – Current and Reference Conditions
- Fisheries – Current and Reference Conditions
- Riparian Vegetation – Current and Reference Conditions
- The Key Issues of the Aquatic Domain

## The Terrestrial Domain

- Introduction
- Air Quality – Current and Reference Conditions
- Fire – Current and Reference Conditions
- Geology – Current and Reference Conditions
- Soils – Current and Reference Conditions
- Vegetation – Current and Reference Conditions
- Plant Species of Concern
- Noxious Weeds and Exotic Pest Plants
- Wildlife – Current and Reference Conditions
- Key Issues of the Terrestrial Domain

## The Human Domain

- Introduction
- Land Ownership and Land Uses – Current and Reference Conditions
- Institutional Setting – Current Conditions
- Economic Setting – Current Conditions
- Social Setting – Current Conditions
- Service Flows, Values and Economic Forces – Current Conditions
- Key Issues of the Human Domain

## Conclusions

- Issues
- Interrelationships
- Land Uses – Factors Involved in Change
- Management Policies
- Data Gaps
- Conclusions

## Projects and Recommendations

- Restoration Opportunities
- Restoration Measures
- Other Management Recommendations

## Monitoring

### References

The product and success of this project will be measured by the document itself, the Shasta West Watershed Assessment, meeting minutes, news articles, and newsletters. The conservation outcome will be the conclusions in the assessment and the cohesiveness of the Shasta West CRMP Group in moving forward with requests for funds to implement restoration work in the watershed as identified in the assessment and further expanded in the next step, a management plan.

Through the use of the Watershed Information Model, also being proposed to CALFED in this grant cycle, the watershed assessment will be published for information exchange with others interested in watershed management.

The general process for completing the watershed assessment is as follows:

- Meetings with the Shasta West CRMP Group
- Formation of a Technical Advisory Committee
- Preparing a Request For Proposal and distribute it to potential consultants to bid on the assessment
- Receiving bids, analyze proposals and contract with a consultant
- Holding public meetings during the contract period to offer information and project updates to watershed stakeholders and the general public
- Distributing newsletters to provide landowners and stakeholders with information on program status, issues of concern and notice of upcoming meetings and workshops
- Submitting articles to local newspapers regarding the assessment objectives and progress.
- Reviewing and commenting on the draft assessment by the TAC
- Presenting the draft assessment to the community in a public meeting
- Completing and distributing the final report
- Posting the final report on WSRCD web site

**2. Describe your qualifications and readiness to implement the proposed project.**  
**a. Describe the level of institutional structure, ability and experience to administer funds and conduct the project. Identify the fiscal agent responsible for handling the funds.**

The contract for this project will be with the Western Shasta Resource Conservation District (WSRCD), which has been implementing erosion control, fuels reduction projects, fisheries enhancement and water quality projects since it was formed in January 1957. The district consists of approximately 1.7 million acres in Western Shasta County. The purpose of the WSRCD is to collaborate with willing landowners, government agencies, and other organizations to facilitate the conservation or restoration of Western Shasta County's natural resources.

WSRCD is grant funded and has no discretionary funds. The WSRCD has been awarded over \$6.5 million from state, federal and private agencies specifically for work in Western Shasta County. The district operates and implements projects with a staff of eleven. The district's annual budget has grown from \$2,000 a year to over \$1.2 million a year. Currently the district manages 23 grant contracts with federal, state, and local agencies, private foundations and private organizations. Many of these are multi-year grants.

During the past few years the focus of the district has been on erosion control, fuels reduction to prevent catastrophic wildfire, watershed restoration (including floodplain restoration), and projects to improve fisheries habitat for threatened and endangered species. In the past five years the watershed projects have been implemented in these watersheds: Upper and Lower Clear Creek, Middle Creek, Shasta West, Cottonwood Creek, Battle Creek, and Cow Creek. The Lower Clear Creek channel project is of such a scale, it is likely to become one of the best models for total watershed restoration (including re-channeling) in the country.

The district has a 7-member volunteer board of directors representing landowners in the district, and who hold leadership positions within the district, providing direction in their community's natural resource programs. Their backgrounds include ranching, agriculture, forestry, teaching, and finance. The Shasta County Board of Supervisors appoints the district directors. WSRCD staff includes:

Jeff Souza, Projects Manager for the district, is responsible for the successful implementation of dozens of projects in the areas of wildlife and fisheries restoration, erosion control, fuels reduction, and coordinated resource planning; coordinated wildlife habitat restoration projects; vegetation specialist. Jeff has over ten years experience in watershed restoration projects and supervises a staff of six. Jeff has an M.S. in Agriculture, CSU-Chico. B.S. in Environmental and Systematic Biology, California Polytechnic State University, San Luis Obispo. Associate of Arts, General Studies, Butte Community College, Oroville, California.

Mary Schroeder, Administrative Manager, is chief administrative officer of the district, responsible for representing, managing and directing the district's internal business operations consistent with the strategic plan. Her work includes grant writing, grant management, fiscal responsibility, administration of office staff and two watershed coordinators. She has over 20-years business management in resource and wood products industries and is a leader in working

with collaborative local groups on natural resource issues. Mary's experience includes operations supervisor and management in both the pulp and paper and wood-fired power plant industries. She has a B.S. in Forest Industries Management from The Ohio State University, 1975-78. MBA, City University, partially completed. Certificate in Land Use Planning, U.C. Davis, partially completed.

Hide Nakashima, Projects Coordinator for the district, is responsible for the successful implementation of a variety of grants for natural resource restoration and rehabilitation projects; interpretation, analysis, and adherence to contract funding terms and conditions; hire, supervise and evaluate field staff employees working on District projects. Coordinate with sponsoring and other applicable state and federal agencies on project work and compliance with regulations. She has a B.S. in Natural Resource Management, Forestry, University of Nevada at Reno. Class A Sawyer, S212 Chainsaw Class 1993-1999.

Jack Bramhall, Watershed Coordinator for the district, is responsible for coordinating the Shasta West and Upper Clear Creek watershed groups. Jack has been with the RCD since August 2000 and has a M.S. in Forest Management and B. S. in Forestry, with an A.A. in Accounting. He is a California Registered Professional Forester and a Certified Professional in Erosion & Sediment Control. Jack's accomplishments include planning with non-industrial private forest landowners in eleven counties in northern California and the application of access road erosion control systems.

The funds for this grant will be handled by the Fiscal Officer of the Western Shasta Resource Conservation District under the supervision of the Administrative Manager of the District, who reports to the Board of Directors.

**b. Describe technical support available (including support needed for environmental compliance and permitting) to begin and complete the project in a timely manner.**

Technical support is available from collaborators on this project, who will be invited to participate on a Technical Advisory Committee, which will include the Bureau of Reclamation, Natural Resources Conservation Service, U.S. Fish & Wildlife Service, California Department of Fish & Game, National Marine Fisheries Service, California Department of Water Resources, Bureau of Land Management, Shasta West CRMP Group, and the Shasta-Tehama Bioregional Council. All of the above agencies and groups have participated on other advisory committees for the district for the past few years.

**c. List any previous projects of this type you or your partners have implemented, funded either by CALFED or other programs.**

The WSRCD has completed other watershed assessments and watershed management plans:

- Lower Clear Creek Watershed Analysis, January 1996
- Lower Clear Creek Watershed Management Plan, September 1998
- Upper Clear Creek Watershed Analysis, April 1999
- Cow Creek Watershed Assessment (currently being implemented and should be completed by November 2001)

**3. Provide a completed budget cost sheet and describe the basis for determining project costs, including comparisons with other similar projects, salary comparisons, and other listed costs. Include all costs of environmental compliance, such as CEQA and/or NEPA, and permits. Describe how the approach to achieving the stated goals of the project demonstrates an effective cost relative to its anticipated benefits.**

The costs on the attached budget sheet were calculated by using actual district experience in completing watershed assessments in Lower Clear Creek, Upper Clear Creek and the current assessment for the Cow Creek watershed, which should be completed in June. Costs include an experienced consultant to prepare the watershed assessment, project management, support for meetings of the Technical Advisory Committee, education and outreach throughout the watershed community, publishing draft and final assessment reports.

The assessment is an important base document for developing a watershed management plan, which will detail and prioritize specific restoration and enhancement projects to be conducted in the watershed. Both the assessment and management plan documents will be used as the basis for seeking grant funds to implement priority projects and develop projects to fill in important data gaps. Therefore, the cost of the assessment will produce benefits for many years to come.

**Cost Share Information**

The cost share for this project is in-kind work from the various agencies involved in the Technical Advisory Committee, those agency personnel providing data and reports from their files that include the Shasta West Watershed, and time contributed by the Western Shasta Resource Conservation District Board of Directors at CRMP meetings.

The rate used to calculate in-kind contributions are:

|                    |           |
|--------------------|-----------|
| Agency Personnel   | \$60/hour |
| WSRCD Board Member | \$35/hour |

**4. Describe the technical feasibility of the proposed project.**

**a. Describe any similarity to previously implemented successful projects in this community or elsewhere.**

WSRCD has completed watershed assessments/analysis on both the Lower and Upper Clear Creek Watersheds, and is currently conducting an assessment of the Cow Creek Watershed. In addition, a Watershed Management Plan was completed on Lower Clear Creek in 1998. Both the Lower Clear Creek Watershed Analysis and the Management Plan have been important support documents in receiving funding for restoration projects in the watershed. To date the district has successfully been awarded 25 grants for projects in Lower Clear Creek. In Upper Clear Creek, the watershed analysis has been the key support document in receiving 4 grants for work in that watershed.



**b. If the project proposes a new approach or new method with a high likelihood of adding new knowledge and or techniques, or with the potential to fill identified gaps in existing knowledge, describe how it will do so, and what monitoring components will provide substantiation of results.**

The assessment will not be adding new knowledge or techniques, but pulling together existing data, knowledge and techniques. The purpose of the assessment is to gather and integrate existing information on the physical, cultural and demographic variables, which characterize the watershed at the present and past; describe changes over time in land use, vegetation, demographics, and related parameters; and present the human, aquatic, riparian and terrestrial features of the ecosystem, along with identifying areas in which additional data are needed.

**c. Explain how the finished project will be maintained as necessary, and to what degree it may require continued funding from outside the community.**

Although the project itself will not require continued funding, the next step in the process is to obtain funding to complete a watershed management plan and implement projects to improve the health and vitality of the watershed, while at the same time seeking funds to fill data gaps. These will require additional funding.

**5. Describe how the monitoring component of the project will help determine the effectiveness of project implementation and assist the project proponent and CALFED with adaptive management processes.**

Adaptive management is possible only when an adequate feedback loop is available to assess assumptions, decisions and projects based on their outcomes. It begins with base line data, which is one of the main purposes of a watershed assessment. It will identify available data and data gaps. Effective monitoring programs for projects implemented in the watershed must be based on sound science and includes a wide range of participants to help improve decision-making processes for enhancing watershed health. The process of conducting the watershed assessment using a Technical Advisory Committee, meetings of local landowners, residents, stakeholders, and agencies all contributes to assuring that a wide range of participants stay involved.

**a. Identify performance measures appropriate for the stated goals and objectives of the project.**

The performance measure for the watershed assessment is the publication of a document that captures all of the pertinent information about the various aspects of the watershed in both current and past reference conditions, including recommendations. Review and approval of the document by the Technical Advisory Committee is important in assuring the scope is adequate and contents are complete.

**b. Describe how this project will coordinate with and support other local and regional monitoring efforts.**

This will be the third watershed assessment/analysis conducted by the WSRCD. Due to the significant level of participation by agency representatives in the previous and current assessments, information sharing and coordination of the data on the Shasta West watershed will be greater than an isolated, stand alone project. WSRCD will also include the final assessment document on its web site. If the district receives funding from CALFED for its proposed Interactive Watershed Information Model (also submitted in this round of proposals), the watershed assessment will be available in a regional context to students, teachers, agencies, citizens, watershed groups, and CALFED researchers and scientists. An effective monitoring program for a watershed assessment would include a periodic look at how and when critical data gaps are filled, a management plan completed, and projects implemented. All are based on sound science, and include a wide range of participants to help improve decision-making processes for enhancing watershed health.

**c. Provide a description of any citizen monitoring programs that will be part of this project.**

A citizen monitoring program has not been developed at this time.

**d. What monitoring protocols will be used, and are they widely accepted as standard protocols?**

Not applicable at this point.

**e. Describe how the type and manner of data collection and analysis will be useful for informing local decision making.**

The Shasta West Watershed Assessment will bring together information on present and reference conditions and relate the information on a landscape level. Local decision making regarding natural resources includes decisions made by federal and state agencies, local city and county government, and WSRCD. The information in the assessment will assist local decision makers in relating their actions with current and reference conditions in the watershed. For instance, a county decision to approve a new subdivision or division of property for construction can use information in the watershed assessment in drafting comprehensive conditions that are added to building or construction permits to protect resources at risk. Assessment information can assist in local planning efforts by agencies and local government, as well as by the WSRCD in developing restoration or enhancement projects to improve the health and function of the watershed.

**6. If this project is to develop specific watershed conservation, maintenance or restoration actions, describe the scientific basis for the action(s) described in the proposal.**

**a. Any assessment of watershed condition(s) that has already been developed by you or others.**

The interest in conducting an assessment of the Shasta West watershed stems from work WSRCD has done in one of the subwatersheds, Middle Creek, over the past ten years. Problems in the watershed were created by extensive land development. Large sections of the watershed had been graded for roads and housepads on steep, highly erodible decomposed granite soils without adequate erosion controls. This resulted in a high rate of sediment discharge into Middle Creek, which flows directly into the Sacramento River, where it smothered rainbow trout and steelhead spawning habitat, decreasing aquatic habitat and water quality. In 1987 a USFWS report identified a decrease in the quantity of salmon nests (redds) in the Sacramento River immediately downstream of the Middle Creek confluence. In 1993 the Soil Conservation Service issued an *Erosion and Sediment Control Study for Middle Creek Watershed*. With this report WSRCD was able to get grant funding and began erosion control efforts to decrease sediment runoff into the creek.

Road building and home construction have continued in the watershed and with it, the increased risk of wildfire. Recognizing a fire in the thick vegetation found throughout the watershed could damage the effectiveness of the erosion control projects, in 1994 WSRCD received funding to develop *A Strategic Wildfire Defense Plan for the Middle Creek Watershed*. This report provided the background needed to promote ecosystem stability throughout the community and reduce fire hazards. Since then WSRCD has continued to work with CDF to incrementally create strategic fuelbreaks in the watershed when funding is available.

In 1995 WSRCD brought together landowners, stakeholders and agencies to form the Middle Creek CRMP and together sponsored a 24-page report, compiled by the Natural Resources Conservation Service, called the *Middle Creek Local Implementation Plan*. By this time, sheet and rill erosion from non-treated areas of the watershed were excessive. The plan discussed watershed problems and identified a plan for restoration and protection of aquatic habitat. It included land treatment, fuels management and cleanout behind Swasey Sediment Dam. Out of 21 identified concerns, the items with the 'highest degree of significance' were water quality, streamflow, aquatic habitat, endangered and threatened species, erosion and sediment.

In 1997 USFWS awarded a 3-year grant to WSRCD for the periodic cleanout of sediment behind Swasey dam. In 1998 WSRCD received funding from the Cantara Trustee Council through DFG to inject spawning gravel at a key location in Middle Creek. The same year the Muletown Road fuelbreak was completed by WSRCD and funded by CDF. Due to the success of the gravel injection, in 2000 the Cantara Trustee Council again funded additional gravel injections for Middle Creek, along with an erosion inventory for the Shasta West watershed.

In 2000 the DOC awarded WSRCD funds to create the Rock Creek fuelbreak (Rock Creek is another subwatershed in Shasta West). Also in 2000 CDF awarded WSRCD funds in a two year

grant to create additional fuelbreaks, conduct fuelbreak maintenance and education throughout the Shasta West watershed.

**b. Previous assessment(s) used to establish your project goals and objectives, or to inform the basic assumptions of your proposal.**

Erosion and Sediment Control Study for Middle Creek Watershed, Soil Conservation Service, 1993. A Strategic Wildfire Defense Plan for the Middle Creek Watershed, Western Shasta Resource Conservation District, 1994. Middle Creek Local Implementation Plan, Natural Resources Conservation Service, 1995.

**c. A description of the scientific assumptions used to develop the project goals, objectives and proposed actions, and the degree to which those assumptions are widely accepted (both in the science community as a whole, and in the watershed community).**

In April 1993, President Clinton commissioned an interagency scientific team to develop a set of alternatives to manage ecosystems within the range of the northern spotted owl. This effort culminated in the report by the Forest Ecosystem Management Assessment Team (FEMAT) entitled: *Forest Ecosystem Management: An Ecological, Economic, and Social Assessment*, in July 1993. The FEMAT report was used as the cornerstone in the Final Supplemental Environmental Impact Statement (FSEIS) titled *Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl*. The Record of Decision (ROD) for this FSEIS was signed in April, 1994. The ROD requires a watershed analysis on Forest Service and Bureau of Land Management lands. A significant part of the President's Plan is the Aquatic Conservation Strategy. As defined in the ROD, there are four critical components of this strategy, riparian reserves, key watersheds, watershed analysis and watershed restoration. According to the ROD, watershed analyses should be conducted in all watersheds on federal lands as a basis for ecosystem planning and management. The ROD included procedures for conducting analysis that evaluates geomorphic and ecological processes operating in specific watersheds. A watershed analysis provides the basis for monitoring and restoration programs and is the basic cornerstone for WSRCD watershed projects.

**d. A discussion of how the proposed actions are (are not) consistent with the scientific assumptions and previous assessments completed in the watershed.**

The proposed watershed assessment is consistent with the previous assessments completed in segments of the Shasta West watershed, as described above.

**e. A description of what baseline knowledge was used to support the management actions described in the proposal, or the likelihood that the management actions will generate more robust baseline knowledge.**

The watershed assessment is an analytical process used to develop and document a scientifically-based understanding of the interactions and functions occurring within a watershed. It is not a decision making process requiring impact assessment and public review, but becomes a basic element for future management decision making.

7.

**A. How will the proposal address multiple CALFED objectives (in Section I) in an integrated fashion, with emphasis on water supply reliability, water quality, ecosystem quality, and levee stability objectives CALFED has established for Stage 1 of the program?**

The watershed assessment looks at all data relating to ecosystem quality, water supply, and water quality, all Primary Objectives (1.2.1) of the Watershed Program Plan. The assessment recognizes water diversions and competition for use have increased over time. The assessment recognizes good water quality is required to maintain high-quality habitat to support a variety of fish and wildlife populations and recommends actions to reduce or eliminate parameters that degrade water quality in the watershed.

This proposal also supports the work of the Shasta West CRMP, Technical Advisory Committee and a watershed coordinator from WSRCD. This supports CALFED Watershed Program Plan Primary Objectives (1.5.1) to facilitate and improve coordination, collaboration and assistance among government agencies, other organizations, and local watershed groups. This proposal supports education and outreach within the watershed. This proposal brings with it the ability to integrate the information in the assessment with other CALFED program elements. This proposal begins an implementation strategy that will ensure support and long-term sustainability of local watershed activities.

**B. Explain how the proposal will help define and illustrate relationships between watershed processes (including human elements), watershed management, and the primary goals and objectives of the CALFED (see Section I).**

The assessment will lead to development of a watershed management plan, which includes erosion and fuels reduction projects to protect water quality. This supports the CALFED goal of improved water quality, since the water quality goals include protection and restoration of surface waters by the minimization of pollutant loadings and negative impacts resulting from urbanization; minimization of soil erosion and sedimentation problems; control and management of runoff to reduce or prevent flooding; management of aquatic and riparian resources for active and passive pollution control; education of watershed constituents.

Watershed restoration in Shasta County is directly connected to the health and well-being of the Bay Delta. CALFED goals and priorities will be linked with local goals and priorities and the connections made strong by including CALFED as a partner in all work done by WSRCD. Relating the needs of the Bay Delta with local needs helps participants develop a clear understanding why restoration work must be consistent with CALFED monitoring protocols to assure long-term success.

Applicability to ERP: The Lower Channel project promotes the goal of improving and increasing aquatic and terrestrial habitats and ecological functions by addressing several ecosystem elements identified in the ERP, including natural sediment supply and restoration of riparian and riverine aquatic habitats. The project is consistent with CALFED goals of improving and increasing aquatic and terrestrial habitats for at-risk species and improving

ecological processes, and addresses several CALFED ecosystem elements and stressors described in the ERP. In addition, the ERP restoration vision identifies habitat restoration as an integral step toward improving chinook salmon and steelhead production in Clear Creek (ERP Vol. II p. 170).

**C. Identify a lead agency for environmental compliance, such as CEQA or NEPA. Describe the program's strategy and timetable on environmental compliance.**

CEQA or NEPA requirements do not apply to this project, since it is an assessment of available data and information.

**8. Describe any other important aspects of your program that you could not address in the above items, and that you feel are critical to fully describing your project.**

Wildland fuel loading and significant urban development are major problems in the Shasta West Watershed, which drains into the Sacramento River. It is an area of high fire incidence and rugged topography with a growing residential community. The watershed supports spawning runs of rainbow trout, steelhead and salmon. CDF and the WSRCD have worked closely to construct shaded fuelbreaks in the Middle and Rock Creek portions of the watershed, based on a community fire-safe plan.

WSRCD has been inconsistently coordinating a CRMP group in Shasta West through fuels reduction projects when funding is available from CDF. Recently two community meetings have been held with very good response. Several projects are being completed involving fuels reduction, which is a critical issue for residents in this area. The watershed assessment will broaden the interests of landowners and stakeholders.

Impacts include a clear plan for developing a watershed management plan that will include assistance from residents and stakeholders throughout the community. It will address the current need to maintain the work that has already been done in the watershed, such as the periodic cleanout of sediment from behind Swasey Sediment Dam in the watershed to protect the enhancement of spawning and rearing habitat on Middle Creek and the Sacramento River.

## **ATTACHMENTS**

### **Budget**

Detailed Budget

Summary Budget and Tasks

### **Notifications - Submittal Letters:**

Shasta County Board of Supervisors; Tribal Government – Redding Rancheria; Shasta College; California Department of Forestry and Fire Protection; Shasta-Tehama Bioregional Council; Shasta Community Service District; Shasta County Office of Education

### **Response Letters of Support Received:**

Victoria Project Fire Safe Committee; Shasta College; Shasta County Board of Supervisors; Shasta County Office of Education; Shasta-Tehama Bioregional Council; California Department of Forestry and Fire Protection

### **Letters Sent With Copy of Proposal:**

Shasta College; Shasta County Board of Supervisors; Shasta County Office of Education; Tribal Government – Redding Rancheria; California Department of Forestry and Fire Protection; Shasta-Tehama Bioregional Council; Shasta Community Service District

### **Memo on Lack of Response From Redding Rancheria**

### **Environmental Information Form**

### **Environmental Permitting and Approvals Form**

### **Land Use Checklist**

### **Memo on Lack of Response by Redding Rancheria**

Redding Rancheria is the only tribal government unit in the Western Shasta County watersheds where WSRCD has watershed restoration projects underway. Early in the Lower Clear Creek CRMP meetings a representative from the tribe would attend, but we have not had anyone attend any of our meetings for almost two years.

Redding Rancheria owns and operates Win River Casino, a major Indian gaming casino near Redding, and has just developed a Mini-Mart and is in the planning stages for a major hotel/resort near the casino.

We have called several people at the Rancheria and even made appointments to meet with them, but the meetings get cancelled or the Rancheria representative does not show up.

We continue to send information to the tribe about our work in the watersheds, but their priorities are focused on development at this time, therefore, we do not have a letter of support from the Rancheria in this proposal.



| Shasta West Watershed Assessment                             |   | 3 yrs |        |          |        |           |         |       |         |         |
|--|---|-------|--------|----------|--------|-----------|---------|-------|---------|---------|
| Tasks  | Labor Rate  | Hours | Total  | Supplies | Travel | Materials | Subcont | Match | CALFED  | TOTAL   |
| 1-Admin  | w/% benefits  |       |        |          |        |           |         |       | 61,064  | 61,064  |
| Proj Mgr   | \$32/hr (30%)   | 462   | 14,784 |          |        |           |         |       |         |         |
| Admin Mgr  | \$28/hr (16%)   | 1,122 | 31,416 |          |        |           |         |       |         |         |
| Coordinator  | \$20/hr (20%)   | 556   | 11,120 |          |        |           |         |       |         |         |
| Secretary  | \$12/hr (20%)   | 312   | 3,744  |          |        |           |         |       |         |         |
| 2-TAC  | 6 mtgs @ \$100=\$600, copies \$200, supplies \$1500, mailings \$450, comment on script and draft video program \$800  |       |        | 2,000    | 150    | 2,000     |         | 3,000 | 4,150   | 7,150   |
| 3-PBS Program "Watershed Restoration: The Clear Creek Model" | Write script, subcontract filming, editing, post production and distribution, marketing literature.   |       |        | 150      | 125    | 350       | 130,000 | 3,000 | 130,625 | 133,625 |
| 4-Education  | 3 public tours @\$150=\$450; 3 public workshops @\$200=\$600; history of watershed w/10 color and 75 b&w photos 25 @\$35=\$875 and 250@\$20=\$5000; 5000 brochures @\$1.25 ea=\$6250; 3 technical papers copied and distributed \$100; add brochure and technical papers to web site 12 hrs @ \$20/hr=\$240 |       |        | 6,175    | 200    | 6,900     | 240     | 5,000 | 13,515  | 18,515  |
| 5-Powerpoint P+A3resentation                                 | Computer projector \$5500, screen \$175, write script, subcontract computer presentation \$300.   |       |        | 200      |        | 5,675     | 300     |       | 6,175   | 6,175   |
|  |   |       |        |          |        |           |         |       |         |         |

| Tasks                     | Labor Rate  | Hours | Total  | Supplies | Travel | Materials | Subcont | Match  | CALFED  | TOTAL   |
|---------------------------|---|-------|--------|----------|--------|-----------|---------|--------|---------|---------|
| 6- K-14 Education Program | Develop curriculum units, teacher workshops, database, field lab days |       |        | 75       | 125    |           | 42,000  |        | 42,200  | 42,200  |
|                           |   |       |        |          |        |           |         | 11,000 | 257,729 | 226,529 |
| Indirect Overhead         | 15%   |       |        |          |        |           |         |        | 38,659  |         |
| Total                     |   | 2,452 | 61,064 | 8,525    | 475    | 14,925    | 130,540 | 11,000 | 296,388 | 307,388 |
|                           |   |       |        |          |        |           |         |        |         |         |
|                           |   |       |        |          |        |           |         |        |         |         |
|                           |   |       |        |          |        |           |         |        |         |         |
|                           |   |       |        |          |        |           |         |        |         |         |
|                           |   |       |        |          |        |           |         |        |         |         |
|                           |   |       |        |          |        |           |         |        |         |         |
|                           |   |       |        |          |        |           |         |        |         |         |
|                           |   |       |        |          |        |           |         |        |         |         |
|                           |   |       |        |          |        |           |         |        |         |         |
|                           |   |       |        |          |        |           |         |        |         |         |

# CALFED WATERSHED PROGRAM SUMMARY BUDGET

| <b>Shasta West Watershed Assessment</b> |   |  |                 |                  |              |
|---|---|--|-----------------|------------------|--------------|
| <b>Task No.</b>                         | <b>Task Description</b>   | <b>Completion</b>                              | <b>Match \$</b> | <b>CALFED \$</b> | <b>Total</b> |
| <b>1</b>                                | <b>Project Management and Administration</b>  |  |                 | 26,880           | 26,880       |
| 1a                                      | Provide all technical and administrative services as needed for contract completion; monitor, supervise and review all work performed; coordinate budgeting and scheduling to assure the contract is completed within budget, on schedule and in accordance with approved procedures, applicable laws and regulations.                    | Ongoing  |                 |                  |              |
| 1b                                      | Ensure contract requirements are met through the completion of Quarterly Status Reports.  | 10th of every January, April, July and October |                 |                  |              |
| 1c                                      | Award subcontract to appropriate organization through a legally enforceable agreement between the RCD and the subcontractor.  | Sep-01   |                 |                  |              |
|   | <b>Task Products:</b> Quarterly Status Reports and subcontract documentation  |  |                 |                  |              |
|   | <b>Success Criteria:</b> Reports Completed and contract signed with subcontractor   |  |                 |                  |              |
|   |   |  |                 |                  |              |
| <b>2</b>                                | <b>Technical Advisory Committee</b>   |  | 6,000           | 2,400            | 8,400        |
| 2a                                      | Form a Technical Advisory Committee, which includes representatives from agencies.  | Aug-01   |                 |                  |              |
| 2b                                      | Provide meetings as needed for input from the TAC regarding conduct of the watershed assessment and overall direction of the watershed program. The TAC will review the interim project reports and draft final report. TAC comments on the draft project final report shall be addressed and incorporated into the project final report. | From August 2001 ongoing through October 2002  |                 |                  |              |
|   | <b>Task Products:</b> A Technical Advisory Committee for the Shasta West Watershed program.   |  |                 |                  |              |
|   | <b>Success Criteria:</b> A minimum of four agencies consistently participating on the TAC.  |  |                 |                  |              |
|   |   |  |                 |                  |              |
| <b>3</b>                                | <b>Education and Outreach</b>   |  | 2,000           | 10,880           | 12,880       |

# CALFED WATERSHED PROGRAM SUMMARY BUDGET

|          |  |                                |  |        |        |
|----------|--|--------------------------------|--|--------|--------|
| 3a       | Conduct at least two public review meetings during the contract period to offer information and project updates to the watershed stakeholders and general public. The first meeting will describe the scope and overall objectives of the watershed assessment. The second meeting will review the Draft Report before it is submitted to the Contract Manager for review. | Oct 2001, June 2002            |  |        |        |
| 3b       | Prepare semi-annual newsletters to provide landowners and other stakeholders with information on the program status, issues of concern to the watershed and notice of upcoming meetings and workshops.   | Oct 2001, April 2002, Oct 2002 |  |        |        |
| 3c       | Submit at least two articles to local newspapers concerning program objectives and progress.   | October 2001, May 2002         |  |        |        |
|          | <b>Task Products:</b> Two public meetings, semi-annual newsletters, watershed mailing list, and at least two local newspaper articles.   |                                |  |        |        |
|          | <b>Success Criteria:</b> A minimum of 15 people attending the public meetings; one newspaper article published.  |                                |  |        |        |
|          |  |                                |  |        |        |
| <b>4</b> | <b>Watershed Assessment</b>  |                                |  | 65,000 | 65,000 |
| 4a       | Prepare a Watershed Assessment based on earlier information and existing information of watershed attributes, including watershed history; land use; hydrology and water use; water quality; channel morphology and sediment transport; fisheries and aquatic habitat; fuels and fire conditions.  | Aug-02                         |  |        |        |
| 4b       | An analysis of earlier and present conditions and conclusions on each of the watershed attributes by the TAC.  | Oct-02                         |  |        |        |
|          | <b>Task Products:</b> Shasta West Watershed Assessment.  |                                |  |        |        |

# CALFED WATERSHED PROGRAM SUMMARY BUDGET

|          |   |        |               |                |                |
|----------|---|--------|---------------|----------------|----------------|
|          | <b>Success Criteria:</b> Watershed Assessment completed on schedule   |        |               |                |                |
|          |   |        |               |                |                |
| <b>5</b> | <b>Draft and Final Project Reports</b>  |        | 2,000         | 9,275          | 11,275         |
| 5a       | Prepare a draft final report, which includes the results of the task and subtask work completed. Submit the draft to the Contract Manager, TAC and all other affected public and private agencies and interested parties for review and comment. Prepare responses for all comments made on the draft report. | Sep-02 |               |                |                |
| 5b       | Prepare a final report incorporating all relevant comments made on the draft report. Submit the final report to the Contract Manager. Distribute the final report to members of the TAC and all public and private agencies and individuals with an interest in the project.                                  | Oct-02 |               |                |                |
|          | <b>Task Products:</b> Draft and Final Reports   |        |               |                |                |
|          | <b>Success Criteria:</b> Reports completed and distributed.   |        |               |                |                |
|          |   |        |               |                |                |
|          | Indirect Overhead 15%   |        |               | 17,165         | 17,165         |
|          |   |        |               |                |                |
|          | <b>Total</b>  |        | <b>10,000</b> | <b>131,600</b> | <b>141,600</b> |